

# PATENT COOPERATION TREATY

From the:  
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

To:

IP Strategies  
PO BOX 1254  
Camberwell VIC 3124  
Australia

**PCT**

## WRITTEN OPINION OF THE INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY (PCT Rule 66)

		Date of mailing (day/month/year)  <b>22 JUL 2004</b>
Applicant's or agent's file reference  <b>HELLER</b>		REPLY DUE      within <b>TWO MONTHS</b> from the above date of mailing
International application No.  <b>PCT/AU2004/000059</b>	International filing date (day/month/year)  <b>19 January 2004</b>	Priority date (day/month/year)  <b>21 March 2003</b>
International Patent Classification (IPC) or both national classification and IPC  <b>Int. Cl. 7 B09B 3/00, B09C 1/02, C02F 11/00, C05F 7/00</b>		
Applicant  <b>AUSTRALIAN ORGANIC RESOURCES PTY LTD et al</b>		

1.  The written opinion established by the International Searching Authority:

is  is not

considered to be a written opinion of the International Preliminary Examining Authority.

2. This **second** (second, etc.) opinion contains indications relating to the following items:

- Box No. I Basis of the opinion
- Box No. II Priority
- Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- Box No. IV Lack of unity of invention
- Box No. V Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- Box No. VI Certain documents cited
- Box No. VII Certain defects in the international application
- Box No. VIII Certain observations on the international application

3. The applicant is hereby invited to reply to this opinion.

When? See the Reply Due date indicated above. However, the Australian Patent Office will not establish the Report before the earlier of (i) a response being filed, or (ii) one month before the Final Date by which the international preliminary examination report must be established. The Report will take into account any response (including amendments) filed before the Report is established. If no response is filed by 1 month before the Final Date, the international preliminary examination report will be established on the basis of this opinion.

Applicants wishing to have the benefit of a further opinion (if needed) before the report is established should ensure that a response is filed at least 3 months before the Final Date by which the international preliminary examination report must be established.

How? By submitting a written reply, accompanied, where appropriate, by amendments, according to Rule 66.3. For the form and the language of the amendments, see Rules 66.8 and 66.9.

Also For an additional opportunity to submit amendments, see Rule 66.4. For the examiner's obligation to consider amendments and/or arguments, see Rule 66.4bis. For an informal communication with the examiner, see Rule 66.6.

4. The FINAL DATE by which the international preliminary report on patentability (Chapter II of the PCT) must be established according to Rule 69.2 is: 21 July 2005

Name and mailing address of the IPEA/AU  <b>AUSTRALIAN PATENT OFFICE PO BOX 200, WODEN ACT 2606, AUSTRALIA E-mail address: pct@ipaustralia.gov.au Facsimile No. (02) 6285 3929</b>	Authorized Officer  <b>B. PREMARATNE</b> Telephone No. (02) 6283 2407
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WRITTEN OPINION OF THE  
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

International application No.

PCT/AU2004/000059

**Box No. I Basis of the opinion**

1. With regard to the language, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

- This opinion is based on a translation from the original language into the following language , which is the language of a translation furnished for the purposes of:
- international search (under Rules 12.3 and 23.1 (b))
  - publication of the international application (under Rule 12.4)
  - international preliminary examination (under Rules 55.2 and/or 55.3)

2. With regard to the elements of the international application, this opinion has been established on the basis of (*replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this opinion as "originally filed."*):

- the international application as originally filed/furnished
- the description: pages , as originally filed/furnished  
pages , received by this Authority on with the letter of  
pages , received by this Authority on with the letter of
- the claims: pages , as originally filed/furnished  
pages , as amended (together with any statement) under Article 19,  
pages , received by this Authority on with the letter of  
pages , received by this Authority on with the letter of
- the drawings: pages , as originally filed/furnished  
pages , received by this Authority on with the letter of  
pages , received by this Authority on with the letter of
- a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing.

3.  The amendments have resulted in the cancellation of:

- the description, pages
- the claims, Nos.
- the drawings, sheets/figs
- the sequence listing (*specify*):
- any table(s) related to the sequence listing (*specify*):

4.  This opinion has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

- the description, pages
- the claims, Nos.
- the drawings, sheets/figs
- the sequence listing (*specify*):
- any table(s) related to the sequence listing (*specify*):

WRITTEN OPINION OF THE  
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

International application No.

PCT/AU2004/000059

**Box No. V**

**Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

**1. Statement**

Novelty (N)	Claims 1 - 8	YES
	Claims	NO
Inventive step (IS)	Claims 6, 8	YES
	Claims 1 - 5, 7	NO
Industrial applicability (IA)	Claims 1 - 8	YES
	Claims	NO

**2. Citations and explanations:**

The most relevant document relating to novelty and inventive step appears to be D1 = GB 2113199

D1 discloses a process for detoxification of industrial wastes while recovering valuable heavy metals. It also produces a product that can be used for soil improvement in agriculture. The method comprises the steps;

- a) treating a slurry of waste material in water having a solid material content of 100 Kg/ m<sup>3</sup> with sulphuric acid;
- b) separating the solution containing the heavy metal salts;
- c) mixing the solids from the separating step with more acid and separating the solid and liquid phases;
- d) recycling the liquid phase back to the first acid treatment stage;
- e) neutralising the solid phase with slaked lime;
- f) precipitating the heavy metals from the solution from step b) using slaked lime;
- g) separating the precipitate of heavy metal salts.

Thus D1 discloses all the features of claims 1-5 and 7 except the feature of recycling the liquid phase after separation of the precipitated heavy metal salts.

One of the problems the present invention attempts to solve is to keep the process cost to a minimum and one way of doing this is by recycling. Thus it would be obvious to a person skilled in the art to recycle the liquor resulting from the separation of the heavy metal salt precipitates. Also, recycling to preserve water and valuable chemicals is well known in the art. Therefore although, novelty can be acknowledged to the claims 1-5 and 7 inventive step cannot be acknowledged.